# Detection of Parvalbumin in Formalin-Fixed, Paraffin-Embedded Mouse Tissue

**Reagent and Antibody Information**

1X Wash Buffer
3% Hydrogen Peroxide
1% BSA Diluent
1X Citrate Buffer
DAB Chromagen
Hematoxylin

Blocking Solution: Rodent Block M (Ready-To-Use)
Biocare Medical
Concord, CA 94520
www.biocare.net
1-800-799-9499
Catalog # RBM961

Primary Antibody: Rabbit Polyclonal to ?????
SWANT
Switzerland
www.swant.com
Catalog # PV 25

Negative Control Serum: Normal Rabbit Serum
Jackson Immunoresearch Laboratories, Inc.
West Grove, PA 19390
www.jacksonimmuno.com
1-800-367-5296
Catalog # 011-000-001

Polymer Reagent: Rabbit-on-Rodent HRP-Polymer Detection
Biocare Medical
Concord, CA 94520
www.biocare.net
1-800-799-9499
Catalog # RMR622

**Staining Procedure**

Positive Control Tissue: Brain
Stain Localization: Nuclear, cytoplasmic, and membrane

1. Deparaffinize and hydrate slides through the following solutions:

| Solution | Repetitions | Time |
|---|---|---|
| Xylene | 2 times | 5 minutes |
| 100% Ethanol | 2 times | 3 minutes |
| 95% Ethanol | 2 times | 3 minutes |
| 1X Wash Buffer | 2 times | 5 minutes |

2. Quench endogenous peroxidase by placing the slides in 3% hydrogen peroxide for 15 minutes.

3. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

4. Heat-Induced Epitope Retrieval Using The Decloaker
   Add 500 ml of distilled water to the pan inside the decloaker.
   Place a full rack of slides into a Tissue Tek® container with 200 ml of 1X citrate buffer
   (Insert blank slides into any empty slots in the rack to ensure even heating of slides)
   Place the container stably inside the pan and decloak for 5 minutes. *Maximum Pressure* _____
   Depressurize for 10 minutes.
   Remove pan top and cool for 10 minutes. *Temperature Before Cooling Slides*_____
   Rinse the slides in 2 changes of distilled water for 3 minutes each time.

5. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

6. Block with the Rodent Block M Reagent for 20 minutes at room temperature.
   Lot #_____ Exp. Date_____

   DO NOT RINSE SLIDES WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY.
   ONLY WIPE EXCESS BUFFER.

7. Apply primary antibody at a 1:1500 dilution. Incubate for 30 minutes at room temperature.
   Lot #_____ Exp Date _____

   For negative control slides, dilute the protein concentration of the normal rabbit serum to match that of the primary antibody. Make a 1:1500 dilution from this normalized serum, and apply to the slides.
   Incubate for 30 minutes at room temperature.
   Lot #_____ Date Reconstituted_____

8. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

9. Apply the Rabbit-on-Rodent HRP-Polymer Reagent, and incubate for 30 minutes at room temperature.
   Lot #_____ Date Reconstituted_____
10. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

11. Apply the DAB chromogen. Incubate in the dark for 6 minutes at room temperature.
    (Add 1 drop of DAB per ml of substrate)
    Lot #_____ Exp Date_____ New Kit: yes / no

12. Rinse the slides in tap water 3 minutes.

13. Counterstain with Harris Hematoxylin for 20 seconds.

14. Rinse the slides in tap water until water is clear.

15. Gently agitate slides in 1X Wash Buffer until the tissues turn blue.

16. Dehydrate through the following solutions:

| Solutions | Repetitions | Time |
|---|---|---|
| 95% Ethanol | 1 time | 3 minutes |
| 100% Ethanol | 3 times | 3 minutes |
| Xylene | 2 times | 5 minutes |

17. Coverslip

*Updated 03/09/12*